

RESULT 1

LOL4\_HUMAN

ID LOL4\_HUMAN STANDARD; .PRT; 756 AA.  
AC Q96JB6; Q96DY1; Q96PC0; Q9H6T5;  
DT 28-FEB-2003 (Rel. 41, Created)  
DT 28-FEB-2003 (Rel. 41, Last sequence update)  
DT 10-OCT-2003 (Rel. 42, Last annotation update)  
DE Lysyl oxidase homolog 4 precursor (EC 1.4.3.-) (Lysyl oxidase-like  
DE protein 4) (Lysyl oxidase related protein C).  
GN LOXL4 OR LOXC.  
OS Homo sapiens (Human).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
OX NCBI\_TaxID=9606;  
RN [1]  
RP SEQUENCE FROM N.A.  
RC TISSUE=Testis;  
RX MEDLINE=21316447; PubMed=11292829;  
RA Ito H., Akiyama H., Iguchi H., Iyama K., Miyamoto M., Ohsawa K.,  
RA Nakamura T.;  
RT "Molecular cloning and biological activity of a novel lysyl oxidase-  
RT related gene expressed in cartilage.";  
RL J. Biol. Chem. 276:24023-24029(2001).  
RN [2]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=21550107; PubMed=11691589;  
RA Maeki J.M., Tikkanen H., Kivirikko K.I.;  
RT "Cloning and characterization of a fifth human lysyl oxidase  
RT isoenzyme: the third member of the lysyl oxidase-related subfamily  
RT with four scavenger receptor cysteine-rich domains.";  
RL Matrix Biol. 20:493-496(2001).  
RN [3]  
RP SEQUENCE FROM N.A.  
RC TISSUE=Placenta;  
RX MEDLINE=21550106; PubMed=11691588;  
RA Asuncion L., Fogelgren B., Fong K.S.K., Fong S.F.T., Kim Y.,  
RA Csiszar K.;  
RT "A novel human lysyl oxidase-like gene (LOXL4) on chromosome 10q24 has  
RT an altered scavenger receptor cysteine rich domain.";  
RL Matrix Biol. 20:487-491(2001).  
RN [4]  
RP SEQUENCE FROM N.A.  
RC TISSUE=Eye;  
RX MEDLINE=22388257; PubMed=12477932;  
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,  
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,  
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,  
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,  
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,  
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,  
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,  
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,  
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,  
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,  
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,  
RA Fahey J., Helton E., Kettelman M., Madan A., Rodrigues S., Sanchez A.,  
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,  
 RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,  
 RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,  
 RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;  
 RT "Generation and initial analysis of more than 15,000 full-length  
 RT human and mouse cDNA sequences.";  
 RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).  
 RN [5]  
 RP SEQUENCE OF 492-756 FROM N.A.  
 RA Kawabata A., Hikiji T., Kobatake N., Inagaki H., Ikema Y., Okamoto S.,  
 RA Okitani R., Ota T., Suzuki Y., Obayashi M., Nishi T., Shibahara T.,  
 RA Tanaka T., Nakamura Y., Isogai T., Sugano S.;  
 RT "NEDO human cDNA sequencing project.";  
 RL Submitted (AUG-2000) to the EMBL/GenBank/DDBJ databases.  
 CC -!- FUNCTION: May modulate the formation of a collagenous  
 CC extracellular matrix.  
 CC -!- COFACTOR: Copper and LTQ (By similarity).  
 CC -!- SUBCELLULAR LOCATION: Extracellular (Potential).  
 CC -!- TISSUE SPECIFICITY: Expressed in many tissues, the highest levels  
 CC among the tissues studied being in the skeletal muscle, testis and  
 CC pancreas. Expressed in cartilage.  
 CC -!- PTM: The lysine tyrosylquinone cross-link (LTQ) is generated by  
 CC condensation of the epsilon-amino group of a lysine with a  
 CC topaquinone produced by oxidation of tyrosine.  
 CC -!- SIMILARITY: Contains 4 SRCR domains.  
 CC -!- SIMILARITY: Belongs to the lysyl oxidase family.  
 CC -----  
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration  
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -  
 CC the European Bioinformatics Institute. There are no restrictions on its  
 CC use by non-profit institutions as long as its content is in no way  
 CC modified and this statement is not removed. Usage by and for commercial  
 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>  
 CC or send an email to [license@isb-sib.ch](mailto:license@isb-sib.ch)).  
 CC -----  
 DR EMBL; AF338441; AAK71934.1; -.  
 DR EMBL; AY036093; AAK64186.1; -.  
 DR EMBL; AF395336; AAL27543.1; -.  
 DR EMBL; BC007522; AAH07522.1; ALT\_INIT.  
 DR EMBL; BC013153; AAH13153.1; -.  
 DR EMBL; AK025542; BAB15167.1; -.  
 DR Genew; HGNC:17171; LOXL4.  
 DR MIM; 607318; -.  
 DR InterPro; IPR001695; Lysyl\_oxidase.  
 DR InterPro; IPR001190; Srcr\_receptor.  
 DR Pfam; PF01186; Lysyl\_oxidase; 1.  
 DR Pfam; PF00530; SRCR; 4.  
 DR PRINTS; PR00074; LYSYLOXIDASE.  
 DR PRINTS; PR00258; SPERACTRCPTR.  
 DR ProDom; PD013887; Lysyl\_oxidase; 1.  
 DR SMART; SM00202; SR; 4.  
 DR PROSITE; PS00926; LYSYL\_OXIDASE; FALSE\_NEG.  
 DR PROSITE; PS00420; SRCR\_1; 1.  
 DR PROSITE; PS50287; SRCR\_2; 4.  
 KW Oxidoreductase; Copper; Glycoprotein; Repeat; Signal; LTQ.  
 FT SIGNAL 1 24 POTENTIAL.  
 FT CHAIN 25 756 LYSYL OXIDASE HOMOLOG 4.

FT	DOMAIN	32	133	SRCR 1.
FT	DOMAIN	159	287	SRCR 2.
FT	DOMAIN	311	411	SRCR 3.
FT	DOMAIN	421	529	SRCR 4.
FT	DOMAIN	533	736	LYSYL-OXIDASE LIKE.
FT	METAL	611	611	COPPER (POTENTIAL).
FT	METAL	613	613	COPPER (POTENTIAL).
FT	METAL	615	615	COPPER (POTENTIAL).
FT	CROSSLNK	638	674	Lysine tyrosylquinone (Lys-Tyr)
FT				(By similarity).
FT	MOD_RES	674	674	TOPAQUINONE (BY SIMILARITY).
FT	CARBOHYD	198	198	N-LINKED (GLCNAC. . .) (POTENTIAL).
FT	CARBOHYD	629	629	N-LINKED (GLCNAC. . .) (POTENTIAL).
FT	CONFLICT	3	3	W -> R (IN REF. 4).
FT	CONFLICT	101	101	R -> Q (IN REF. 4).
FT	CONFLICT	405	405	D -> A (IN REF. 4).
FT	CONFLICT	493	493	S -> G (IN REF. 3).
FT	CONFLICT	539	539	A -> T (IN REF. 3).
FT	CONFLICT	542	542	V -> A (IN REF. 3).
FT	CONFLICT	703	703	Y -> H (IN REF. 3).
SQ	SEQUENCE	756 AA; 84483 MW; 13051ACADB922BBC CRC64;		

Query Match 99.9%; Score 4174; DB 1; Length 756;  
 Best Local Similarity 99.9%; Pred. No. 0;  
 Matches 755; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy	1	MAWSPPATLFLFLLLLGQPPSRPQSLGTTKLRLVGPESKPEEGRLEVLHQGWGTVCDD	60
Db	1	MAWSPPATLFLFLLLLGQPPSRPQSLGTTKLRLVGPESKPEEGRLEVLHQGWGTVCDD	60
Qy	61	NFAIQEATVACRQLGFEEAALTWAHSAKYQGEGPIWLDNVRCVGTESSLDQCGSNGWGV	120
Db	61	NFAIQEATVACRQLGFEEAALTWAHSAKYQGEGPIWLDNVRCVGTESSLDQCGSNGWGV	120
Qy	121	DCSHSEVDGVICHPRRHRGYLSETVSNALGPQGRRLKEEVRLKPILASAKQHSPVTEGAVE	180
Db	121	DCSHSEVDGVICHPRRHRGYLSETVSNALGPQGRRLKEEVRLKPILASAKQHSPVTEGAVE	180
Qy	181	VKYEGLHWRQVCDQGWMTMNSRVVCGMLGFPSEVPVDSHYRKYVWDLKMRDPKSRLKSLTN	240
Db	181	VKYEGLHWRQVCDQGWMTMNSRVVCGMLGFPSEVPVDSHYRKYVWDLKMRDPKSRLKSLTN	240
Qy	241	KNSFWIHQVTCLGTEPHMANCQVQVAPARGKLRPACPGGMHAVVSCVAGPHFRPPKTKPQ	300
Db	241	KNSFWIHQVTCLGTEPHMANCQVQVAPARGKLRPACPGGMHAVVSCVAGPHFRPPKTKPQ	300
Qy	301	RKGSWAEPRVRLRSGAQVGEGRVEVLMNRQWGTVC DHRWNLISASVVCRQLGFGSAREA	360
Db	301	RKGSWAEPRVRLRSGAQVGEGRVEVLMNRQWGTVC DHRWNLISASVVCRQLGFGSAREA	360
Qy	361	LFGARLGQGLGPIHLSEVRCRGYERTLSDCPALEGSQNGCQHENA AAVRCNVPNMGFQ	420
Db	361	LFGARLGQGLGPIHLSEVRCRGYERTLSDCPALEGSQNGCQHENA AAVRCNVPNMGFQ	420
Qy	421	VRLAGGRIPEEGLLEVQVEVNGVPRWGSVCSENWGLTEAMVACRQLGLGF A I HAYKETWF	480
Db	421	VRLAGGRIPEEGLLEVQVEVNGVPRWGSVCSENWGLTEAMVACRQLGLGF A I HAYKETWF	480

[illegible]

RESULT 2

AAM48743

ID AAM48743 standard; protein; 756 AA.

XX

AC AAM48743;

XX

DT 02-APR-2002 (first entry)

XX

DE Human 47765 lysyl oxidase SEQ ID NO 2.

XX

KW Human; 47765; lysyl oxidase; LSO; cytostatic; haemostatic; hepatotropic;  
KW cardiant; osteopathic; dermatological; antiarteriosclerotic; vasotropic;  
KW antiinflammatory; hypotensive; antiarrhythmic; cell proliferation;  
KW growth; differentiation; leukaemia; tumour; cancer; bone; cartilage;  
KW myeloproliferative; muscular; osteoporosis; cardiovascular; gene therapy;  
KW chromosome mapping; tissue typing; forensic; pharmacogenomic; enzyme.

XX

OS Homo sapiens.

XX

PN WO200192495-A2.

XX

PD 06-DEC-2001.

XX

PF 29-MAY-2001; 2001WO-US017405.

XX

PR 26-MAY-2000; 2000US-0207650P.

XX

PA (MILL-) MILLENNIUM PHARM INC.

XX

PI Meyers R;

XX

DR WPI; 2002-122067/16.

DR N-PSDB; ABA96419, ABA96420.

XX

PT Novel human lysyl oxidase polypeptide, designated 47765, and  
PT polynucleotides, useful in the diagnosis and treatment of cell  
PT proliferation disorders, muscular disorders, bone disorders and skin  
PT elasticity disorders.

XX

PS Claim 14; Fig 1; 115pp; English.

XX

CC The invention relates to human lysyl oxidase (LSO) polypeptide,  
CC designated 47765 with cytostatic, haemostatic, hepatotropic, cardiant,  
CC osteopathic, dermatological, antiarteriosclerotic, vasotropic,  
CC antiinflammatory, hypotensive and antiarrhythmic activity. 47765  
CC molecules are useful for identifying a compound which modulates the  
CC activity of the protein, for developing novel diagnostic and therapeutic  
CC agents for LSO-mediated or related disorders including cell  
CC proliferation, growth or differentiation disorder (e.g. carcinoma,  
CC leukaemia, tumour angiogenesis, hepatic disorders and haematopoietic,  
CC myeloproliferative disorders), muscular disorders (e.g. cardiac muscle  
CC disorder, paralysis, ataxia, myotonia and myokymia), bone disorders (e.g.  
CC osteochondrosis and osteoporosis), skin elasticity disorders (e.g. cutis  
CC laxa, Ehlers-Danlos type V syndrome), cardiovascular disorders (e.g.  
CC arteriosclerosis, ischaemia reperfusion injury, restenosis, arterial  
CC inflammation, vascular wall remodeling, tachycardia, vascular heart  
CC disease, long QT syndrome, congestive heart failure, hypertension,

CC coronary artery disease and arrhythmia) or cartilage based disorders  
CC (e.g. chondromalacia and polychondritis). The encoding polynucleotide is  
CC useful in chromosome mapping, tissue typing, forensic identification, as  
CC markers for pharmacogenomic profiling of a subject and in gene therapy  
XX  
SQ Sequence 756 AA;

Query Match 99.9%; Score 4174; DB 5; Length 756;  
Best Local Similarity 99.9%; Pred. No. 0;  
Matches 755; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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Qy      1 MAWSPPATLFLFLLLLGQPPPSRPQSLGTTKLRLVGPESKPEEGRLEVLHQGWGTVCD 60
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Db      1 MAWSPPATLFLFLLLLGQPPPSRPQSLGTTKLRLVGPESKPEEGRLEVLHQGWGTVCD 60

Qy     61 NFAIQEATVACRQLGFEEAALTWAHSAKYQGEGPIWLDNVRVCGTESSLDQCGSNGWGV 120
      |||
Db     61 NFAIQEATVACRQLGFEEAALTWAHSAKYQGEGPIWLDNVRVCGTESSLDQCGSNGWGV 120

Qy    121 DCSHSEDVGVICHPRRHRGYLSETVSNALGPQGRRLLEEVR LKPI LASAKQHSPVTEGAVE 180
      |||
Db    121 DCSHSEDVGVICHPRRHRGYLSETVSNALGPQGRRLLEEVR LKPI LASAKQHSPVTEGAVE 180

Qy    181 VKYEGHWRQVCDQGWTMNNSRVVCGMLGFPSEVPVDSHYR KVWDLKMRDPKSRLKSLTN 240
      |||
Db    181 VKYEGHWRQVCDQGWTMNNSRVVCGMLGFPSEVPVDSHYR KVWDLKMRDPKSRLKSLTN 240

Qy    241 KNSFWIHQVTC LGTEPHMANCQVQVAPARGKLR PACPGGMH AVVSCVAGPHFRPPKTKPQ 300
      |||
Db    241 KNSFWIHQVTC LGTEPHMANCQVQVAPARGKLR PACPGGMH AVVSCVAGPHFRPPKTKPQ 300

Qy    301 RKGSWAEEPRVRLRSGAQVGEGRVEVLMNRQWGT VCDHRWNLISASV VCRQLGFGSAREA 360
      |||
Db    301 RKGSWAEEPRVRLRSGAQVGEGRVEVLMNRQWGT VCDHRWNLISASV VCRQLGFGSAREA 360

Qy    361 LFGARLGQGLGPIHLSEVRCRGYERTLSDCPALEGSQNGCQHENA AAVRCNVPNMGFQNQ 420
      |||
Db    361 LFGARLGQGLGPIHLSEVRCRGYERTLSDCPALEGSQNGCQHENDA AAVRCNVPNMGFQNQ 420

Qy    421 VRLAGGRIP EEGLEVQVEVNGVPRWGSVCSENWGLTEAMVACRQLGLGF AIHAYKETWF 480
      |||
Db    421 VRLAGGRIP EEGLEVQVEVNGVPRWGSVCSENWGLTEAMVACRQLGLGF AIHAYKETWF 480

Qy    481 WSGTPRAQEVVMSGVRCSGTELALQQCQRHGPVHCSHGGGRFLAGVSCMDSAPDLVMNAQ 540
      |||
Db    481 WSGTPRAQEVVMSGVRCSGTELALQQCQRHGPVHCSHGGGRFLAGVSCMDSAPDLVMNAQ 540

Qy    541 LVQETAYLED RPLSQLYCAHEENCLSKSADHMDWPYGYRLLRFSTQIYNLGR TDFRPKT 600
      |||
Db    541 LVQETAYLED RPLSQLYCAHEENCLSKSADHMDWPYGYRLLRFSTQIYNLGR TDFRPKT 600

Qy    601 GRDSVWWHQCHRHYHSIEVFTHYDLLTLNGSKVAEGHKASFCL EDTNCPTGLQRRYACAN 660
      |||
Db    601 GRDSVWWHQCHRHYHSIEVFTHYDLLTLNGSKVAEGHKASFCL EDTNCPTGLQRRYACAN 660

Qy    661 FGEQGVTVGCWD TYRHDIDCQWVDITDVGPGNYIFQVIVNPHYEVAESDFSNNMLQCRCK 720
      |||
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Db 661 FGEQGVTVGCWDTYRHDIDCQWVDITDVGPNGYIFQVIVNPHYEVAESDFSNNMLQCRCK 720

Qy 721 YDGHVWLHNCHTGNSTPANAELSLEQEQLRNNLI 756

||||||||||||||||||||||||||||||||

Db 721 YDGHVWLHNCHTGNSTPANAELSLEQEQLRNNLI 756





4

; Sequence 2, Application US/09924946  
; Patent No. US20020102645A1

; APPLICANT: American Home Products Corporation

; APPLICANT: Scicchitano, Marshall

; APPLICANT: Beer, Eric

; APPLICANT: Ferris, Elissa

; APPLICANT: Zhang, Jianxiong

; TITLE OF INVENTION: A No. US20020102645A1el Member of the Lysyl Oxidase Gene Family

: CURRENT APPLICATION NUMBER: US/09/924,946

; PRIOR APPLICATION NUMBER: 60/223,763

; PRIOR APPLICATION NUMBER: 60/255,838

```
; NUMBER OF SEQ ID NOS: 11
```

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; SOFTWARE: FastSEO for Windows Version 3.0
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; SEO ID NO 2

; LENGTH: 756

TYPE: PRT

; ORGANISM: Human

US-09-924-946-2

Query Match 100.0%; Score 125; DB 9; Length 756;

Best Local Similarity 100.0%; Pred. No. 1.2e-121;

Matches 125; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PILASAKQHSPVTEGAVEVKYEGHWRQVCDQGWTMNNSRVVCMLGFPSEVPVDSHYRYK 60  
 |||||  
 Db 163 PILASAKQHSPVTEGAVEVKYEGHWRVCDQOGWTMNNSRVVCMLGFPSEVPVDSHYRYK 222

Qy           61 VVDLKM RDPK S RLKSLTNKNSFWIHQVTCLGTEPHMANCQVQVAPARGKL RPACPGGMHA 120  
             | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  
Db          223 VVDLKM RDPK S RLKSLTNKNSFWIHQVTCLGTEPHMANCOVOVAPARGKL RPACPGGMHA 282

Qy	121	VVSCV	125
Db	283	VVSCV	287

5

RESULT 3

US-09-924-946-2

; Sequence 2, Application US/09924946

; Patent No. US20020102645A1

; GENERAL INFORMATION:

; APPLICANT: American Home Products Corporation

; APPLICANT: Evans, Mark

; APPLICANT: Scicchitano, Marshall

; APPLICANT: Bapat, Ashok

; APPLICANT: Beer, Eric

; APPLICANT: Bhat, Ramesh

; APPLICANT: Ferris, Elissa

; APPLICANT: Mastroeni, Rob

; APPLICANT: Zhang, Jianxiong

; APPLICANT: Karathanasis, Sotirios K.

; TITLE OF INVENTION: A No. US20020102645A1el Member of the Lysyl Oxidase Gene Family

; FILE REFERENCE: 0630/1G703-US2

; CURRENT APPLICATION NUMBER: US/09/924,946

; CURRENT FILING DATE: 2001-08-08

; PRIOR APPLICATION NUMBER: 60/223,763

; PRIOR FILING DATE: 2000-08-08

; PRIOR APPLICATION NUMBER: 60/255,838

; PRIOR FILING DATE: 2000-12-15

; NUMBER OF SEQ ID NOS: 11

; SOFTWARE: FastSEQ for Windows Version 3.0

; SEQ ID NO 2

; LENGTH: 756

; TYPE: PRT

; ORGANISM: Human

US-09-924-946-2

Query Match 100.0%; Score 101; DB 9; Length 756;

Best Local Similarity 100.0%; Pred. No. 2.5e-90;

Matches 101; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      1 VRLRSGAQVGEGRVEVLNMRQWGTVC DHRWN LISASVVC RQLGFGSAREALFGARLGQGL 60
          |||||||
Db      311 VRLRSGAQVGEGRVEVLNMRQWGTVC DHRWN LISASVVC RQLGFGSAREALFGARLGQGL 370

Qy      61 GPIHLSEVRCRGYERTLSDCPALEGSQNGCQHENA AAVRCN 101
          |||||||
Db      371 GPIHLSEVRCRGYERTLSDCPALEGSQNGCQHENA AAVRCN 411
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6

RESULT 6

US-09-924-946-2

; Sequence 2, Application US/09924946

; Patent No. US20020102645A1

; GENERAL INFORMATION:

; APPLICANT: American Home Products Corporation

; APPLICANT: Evans, Mark

; APPLICANT: Scicchitano, Marshall

; APPLICANT: Bapat, Ashok

; APPLICANT: Beer, Eric

; APPLICANT: Bhat, Ramesh

; APPLICANT: Ferris, Elissa

; APPLICANT: Mastroeni, Rob

; APPLICANT: Zhang, Jianxiong

; APPLICANT: Karathanasis, Sotirios K.

; TITLE OF INVENTION: A No. US20020102645A1el Member of the Lysyl Oxidase Gene Family

; FILE REFERENCE: 0630/1G703-US2

; CURRENT APPLICATION NUMBER: US/09/924,946

; CURRENT FILING DATE: 2001-08-08

; PRIOR APPLICATION NUMBER: 60/223,763

; PRIOR FILING DATE: 2000-08-08

; PRIOR APPLICATION NUMBER: 60/255,838

; PRIOR FILING DATE: 2000-12-15

; NUMBER OF SEQ ID NOS: 11

; SOFTWARE: FastSEQ for Windows Version 3.0

; SEQ ID NO 2

; LENGTH: 756

; TYPE: PRT

; ORGANISM: Human

US-09-924-946-2

Query Match 100.0%; Score 109; DB 9; Length 756;

Best Local Similarity 100.0%; Pred. No. 5.8e-99;

Matches 109; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      1 VRLAGGRIPEEGLLEVQVEVNGVPRWGSVCSENWGLTEAMVACRQLGLGFATIHAYKETWF 60
          |||
Db      421 VRLAGGRIPEEGLLEVQVEVNGVPRWGSVCSENWGLTEAMVACRQLGLGFATIHAYKETWF 480

Qy      61 WSGTPRAQEVVMSGVRCSTELALQQCQRHGPVHCSHGGRFLAGVSCM 109
          |||
Db      481 WSGTPRAQEVVMSGVRCSTELALQQCQRHGPVHCSHGGRFLAGVSCM 529
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7

RESULT 4

US-09-924-946-2

; Sequence 2, Application US/09924946

; Patent No. US20020102645A1

; GENERAL INFORMATION:

; APPLICANT: American Home Products Corporation

; APPLICANT: Evans, Mark

; APPLICANT: Scicchitano, Marshall

; APPLICANT: Bapat, Ashok

; APPLICANT: Beer, Eric

; APPLICANT: Bhat, Ramesh

; APPLICANT: Ferris, Elissa

; APPLICANT: Mastroeni, Rob

; APPLICANT: Zhang, Jianxiong

; APPLICANT: Karathanasis, Sotirios K.

; TITLE OF INVENTION: A No. US20020102645A1el Member of the Lysyl Oxidase Gene Family

; FILE REFERENCE: 0630/1G703-US2

; CURRENT APPLICATION NUMBER: US/09/924,946

; CURRENT FILING DATE: 2001-08-08

; PRIOR APPLICATION NUMBER: 60/223,763

; PRIOR FILING DATE: 2000-08-08

; PRIOR APPLICATION NUMBER: 60/255,838

; PRIOR FILING DATE: 2000-12-15

; NUMBER OF SEQ ID NOS: 11

; SOFTWARE: FastSEQ for Windows Version 3.0

; SEQ ID NO 2

; LENGTH: 756

; TYPE: PRT

; ORGANISM: Human

US-09-924-946-2

Query Match 100.0%; Score 227; DB 9; Length 756;

Best Local Similarity 100.0%; Pred. No. 2.1e-223;

Matches 227; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      1 DSAPDLVMNAQLVQETAYLEDRLSQLYCAHEENCLSKSADHMDWPYGYRLLRFSTQIY 60
      |||
Db      530 DSAPDLVMNAQLVQETAYLEDRLSQLYCAHEENCLSKSADHMDWPYGYRLLRFSTQIY 589

Qy      61 NLGRDTRPKTGRDSWVWHQCHRHYSIEVFTHYDLLTLNGSKVAEGHKASFCLEDTNCP 120
      |||
Db      590 NLGRDTRPKTGRDSWVWHQCHRHYSIEVFTHYDLLTLNGSKVAEGHKASFCLEDTNCP 649

Qy      121 TGLQRRYACANFGEQGVTVGCWDTYRHDIDCQWVDITDVGPGNYIFQVIVNPHYEVAESD 180
      |||
Db      650 TGLQRRYACANFGEQGVTVGCWDTYRHDIDCQWVDITDVGPGNYIFQVIVNPHYEVAESD 709

Qy      181 FSNMMLQCCKYDGHVWLHNCHTGNSYPANAELSLEQEQLRNNLI 227
      |||
Db      710 FSNMMLQCCKYDGHVWLHNCHTGNSYPANAELSLEQEQLRNNLI 756

```

## RESULT 4

AX323479

LOCUS AX323479 2976 bp DNA linear PAT 07-JAN-2002

DEFINITION Sequence 1 from Patent W00192495.

ACCESSION AX323479

VERSION AX323479.1 GI:18094234

KEYWORDS

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1

AUTHORS Meyers, R.

TITLE A human lysyl oxidase (47765) and uses thereof

JOURNAL Patent: WO 0192495-A 1 06-DEC-2001;

Millennium Pharmaceuticals, Inc. (US)

FEATURES

Location/Qualifiers

source

1. .2976

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CDS

95. .2365

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## ORIGIN

Query Match 78.7%; Score 2844.4; DB 6; Length 2976;

Best Local Similarity 97.6%; Pred. No. 0;

Matches 2872; Conservative 11; Mismatches 59; Indels 0; Gaps 0;

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